Evaluating a Pilot Program on Nursing Moral Distress

Elizabeth A. Leonard, RN, DNP, MBE

Doctorate of Nursing Practice

Drexel University

December 2017

Table of Contents

Abstract

Although there are no published, high-quality, randomized, controlled studies on the subject of moral distress, available literature supports that this nursing phenomenon is frequently experienced, undermines employee engagement, weakens working relationships within the health care team, damages the nurse-patient relationship, and likely contributes to clinical nurse turnover. The overarching objective of this project was to evaluate the quality of an evidence-based, pilot educational program. The appeal and meaningfulness of this program will be assessed by a participant post program evaluation, as well as if the participants are able to define moral distress and its common symptoms, learn healthier coping strategies, and determine if participants can identify opportunities for reducing the frequency of morally distressing events in their work environments. A convenience sample of 23 clinical oncology nurses was recruited from The Hospital of the University of Pennsylvania's oncology units. A knowledge test of moral distress was administered pre and post program, and the approximately one-hour program was delivered using lecture, presentation technologies, and an interactive discussion. No significant difference was observed in participants' moral distress knowledge pre to post in-service. However, significant statistical differences were found in participants' knowledge of personal strategies to offset nursing moral distress, as well as in participants' identifying of institutional supports for this phenomenon. Clinical implications for nursing include that education may provide opportunities for nurses to employ personal strategies and engage institutional support, thereby proactively reducing the frequency as well as the intensity of morally distressing events.

Keywords: nursing moral distress strategies to offset nursing moral distress

The Effect of an Educational Program on Nursing Moral Distress

Nursing moral distress was first identified in the academic literature by Jameton, who wrote, “moral distress arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action” (1984, p. 6). More recently, moral distress is defined as, “the experience of being seriously compromised as a moral agent in practicing in accordance with accepted professional values and standards” (Varcoe, Pauly, Webster, & Storch, 2012, p. 59). This newer definition highlights the effect of moral distress on the moral integrity of the agent, and divides it from other phenomena experienced by healthcare providers, such as emotional distress or compassion fatigue (Whitehead, Herbertson, Hamric, Epstein & Fisher, 2015). Moral distress in clinical nursing is likely inevitable (Eizenburg, Desivilya, & Hirschfeld, 2009), and can be expected to increase as ethical conflicts become more commonplace in the healthcare setting (Ulrich, 2010). Some nurses respond to this unavoidable phenomenon as a rite of passage, and react using adaptive strategies, while others react less positively (Rittenmeyer & Huffman, 2010).

Problem Identification and Significance

Moral distress is associated with burnout and intention to leave a professional position, underscoring the clinical relevance of this problem (Whitehead et al., 2015). Nathaniel (2006) asserts that consequences of unresolved or poorly resolved moral distress are far reaching; many seasoned nurses recall these situations with uncanny clarity, even many years after the actual event. Estimates suggest that fifteen percent of new and intermediate nurses leave the profession due to moral distress (Corley, 2001).

Nurses experience moral distress when they feel unable to fulfill professional duties to patients due to institutional constraints (Rittenmeyer & Huffman, 2010). Examples of

constraining influences include scarce resources, ineffective teamwork, lack of leadership and peer support, institutional values and policies, and litigation fears (Rushton & Kurtz, 2015). Most new nurses are not equipped with the confidence and clinical skills needed to work in uncertain and time-pressured clinical situations, as they lack experience in prioritizing and problem solving techniques (Smith, 2013). In addition, many nurses are not educationally prepared to sort through ethical dilemmas encountered in the clinical area. Zuzelo (2007) observed that 75% of the clinical nurses surveyed in one large Mid Atlantic, urban hospital had no formal ethical education and only 15% had undergone continuing education in bioethics.

The first step to reduce moral distress is to start talking about it (Ulrich, 2010). Recent literature suggests that education may be one antidote to moral distress, by increasing ethical problem solving skills, developing empathy for diverse perspectives of health care team members, and instilling confidence in the clinical nurses' communication. (Robinson et al., 2014). Formal ethics education alone is not enough to strengthen moral agency; adult learners benefit from the active application of ethics knowledge. Determining the morally ideal course of action in a nursing situation requires guided practice in decision-making. Communication skills are also needed to gather necessary information needed to make an informed decision (Robinson et al., 2014).

Review of the Literature

Literature Search Strategies

EBSCO host database and its advanced search functions were utilized, including CINAHL. The SUMMONS database was also searched. The practice of *mining* the references of newer articles on this subject was used as well. Mined publications were examined in full text.

Finally, a biomedical librarian was consulted to enhance the breadth and depth of the search plan.

Using the terms *moral distress* AND *nursing*, with a date range of 1982 to 2015, plus limiting the search to scholarly (peer reviewed) articles, recovered 1053 articles. When limiting findings to recent (within ten years) scholarly articles and adults, 408 publications became available on the subject. The retrieval was subsequently limited to CINAHL and EBSCO databases.

Possible interventions were searched by the terms *nursing moral distress* AND *interventions* OR *strategies*, and limiting the search to scholarly articles and adults. One publication was retrieved, but it did not offer a model for intervention. Rather, the authors suggested the publication could be used as a future model for intervention development. (Fry, Harvey, Hurley, & Foley, 2002). Expanding the search to the terms *moral distress* AND *interventions* AND *nursing*, recovered 101 articles. Six high quality studies were selected from this pool based on the quality of the evidence, timeliness of the writings, and the best description of the definition, measurement, significance, and an educational intervention for nursing moral distress. These six studies address moral distress related to a) how nurses experience moral distress, b) situations that precipitate moral distress, d) the relationship of moral distress to work engagement, and e) an educational program that may influence moral distress.

Definition of Terms

1. Ethical Climate: The consciousness of the organization that influences individual attitudes and behavior, and serves as a reference for employee behavior. This includes workplace factors that contribute to individual decision making and contributes to the employees' code of conduct (Olson 1998).

2. Institutional constraints: limitations or restrictions applied by an organization or its representative that prevent a nurse from practicing in ways that the nurse believes are morally required.
3. Institutional culpability: deserved guilt or blame of an organization or establishment for a moral breech in care delivery, as perceived by the nurse. Some examples of organizational factors include scarce resources, ineffective teamwork, lack of leadership and peer support, institutional values and policies, and fear of litigation (Rushton & Kurtz, 2015).
4. Work engagement: the emotional relationship an employee has with the organization. It is a measure of the employee caring about the organizational goals. A fully engaged employee takes positive steps to enhance the employing organization thereby leading to better business outcomes. An example of a negatively engaged employee is someone who works only for a paycheck (Forbes, 2012).

Moral Distress

Rittenmeyer and Huffman (2010) conducted a systematic qualitative review with meta-synthesis that described the experience of moral distress, contributing factors, and implications for nursing. The purpose of this review was to explore the evidence regarding professional nurses working in hospital environments and how they experience moral distress. Qualitative studies (N = 39) describing moral distress were included. Participants included nurses working in hospital environments who had experienced moral distress. Meta-synthesis was performed by categorizing studies' findings with an intention to portray an accurate interpretation of themes arising from the selected participant's experience of moral distress.

Rittenmeyer and Huffman (2010) further identified four synthesized findings relating to the experience of moral distress: 1) Nurses experience moral distress when they feel unable to satisfy their professional duties to their patients as a result of institutional constraints. This human reactivity may manifest in emotional withdrawal as well as different biological, psychological, and stress related reactions; 2) There is institutional culpability for producing a work environment where moral distress is experienced; 3) The inability and powerlessness of nurses to influence medical decisions related to care perceived as being futile, and the resulting pain and suffering of the patient also contributes to the experience of moral distress; and 4) Unequal hierarchies that are present in many hospitals may also be a contributing factor toward moral distress for nurses when they feel their experiences are not recognized.

Findings from the systematic review suggest that nurses who experience moral distress are more likely to experience burnout and institutional or professional resignation. Some may transfer from the clinical area to a less stressful position. Institutions need to acknowledge this potential impact of moral distress and provide reasonably accessible education about the effects of moral distress on nurses.

Rittenmeyer and Huffman (2010) suggested that nurses must be given opportunities to express concerns about institutional constraints, to become involved in problem solving, and to experience mutually respectful relationships with other healthcare professions who value nurses' contributions. Findings also support that nurses must be able to practice their profession in ways that do not violate their core values while also having leadership opportunities that may assist the impact of moral distress. The authors identified a need for more high quality, interventional, Level II studies on the subject of moral distress in nursing (Rittenmeyer & Huffman, 2010).

Whitehead et al. (2015) addressed moral distress within the context of already strained healthcare and hospital budgets, noting that institutions are losing clinical nurses as a result of this complex phenomenon. A descriptive, comparative design compared levels of moral distress in one large health system among all health professionals. Data were gathered using a web-based survey of demographics, the Moral Distress Scale – Revised (MDS-R), and a shortened version of Olson's Hospital Ethical Climate Scale (HECS-S). Five hundred and ninety-two (N=592) clinicians returned the surveys. Using Pearson correlations and Fisher's exact test, relationships and differences were analyzed. Significantly higher levels of moral distress were found in nurses and other professionals ($p = 0.001$) who were involved in direct patient care than those professionals providing indirect care ($p < 0.001$). Further, moral distress was negatively correlated with ethical workplace climate ($r = -0.516$; $p < 0.001$).

Limitations of this study include a low proportional response rate (22%) to the surveys, and the administration of this study to only one large, rural health care system that had recently changed their administrative structure, resulting in new leadership and a period of adjustment for the staff (Whitehead et al., 2015).

The authors recommended that moral distress interventions can be tailored to minimize staff distress with the ultimate goal of enhancing patient care, staff satisfaction, and improving nursing retention (Whitehead et al., 2015).

Situations that Precipitate Nursing Moral Distress

Zuzelo's (2007) exploration of the types and frequencies of situations that precipitate nursing moral distress in an urban, 500 bed hospital examined the responses of 100 registered nurses (RNs) working in a variety of subspecialties. The respondents' mean number of practice years was 15.24, and the majority (59%) had completed a baccalaureate degree in nursing. This

quantitative, descriptive study used the MDS (modified, four questions deleted) to identify types and frequencies of patient care situations that evoked respondent moral distress. Open-ended questions were crafted to elucidate additional details about moral distress and these responses were thematically analyzed using an audit trail and coding. Internal consistency for the MDS was established with Cronbach's alpha (α=0.95) (Zuzelo, 2007).

Findings revealed that situations precipitating moral distress (from the most to the least) included: working with unsafe staffing levels; working with physicians who were not as competent as patient care required; working with clinical nurses and support staff who were not equal to the demands of care; following ineffectual pain medication regimens; following family wishes to continue life support even when the patient's best wishes were not being served; and responding to physician's orders for unnecessary tests and treatments. Study limitations included the convenience sampling as well as some of the respondents' describing the MDS survey as difficult to understand (Zuzelo, 2007).

Implications for nursing include that nurses providing direct care experience a variety of clinical events that are associated with moral distress, and nurse leaders must be adequately prepared to address nurses' concerns specific to moral dilemmas (Zuzelo, 2007).

The relationship between moral distress and the perceived ethical climate experienced by nurses was explored in a quantitative, cross-sectional survey using the MDS-R and Olson's Hospital Ethical Climate Survey (HECS) among practicing nurses in British Columbia, Canada (N=374). Six thousand of the roughly 33,000 British Columbia nurses consented to be contacted for research purposes, and 1700 survey packages were sent to a randomly generated list to those nurses. A total of 374 (22%) returned the survey. The overall mean MDS-R score was correlated with the mean HECS score. Using Pearson's *r* correlation, the authors found a negative direct

relationship between moral distress intensity and work engagement (r = -0.160, p = 0.002). Further addressing this correlation statistic, a confidence interval for correlation was calculated, based on Fisher's transformation: 95% CI (-0.060, -0.257) confirming a negative correlation. Additionally, a negative direct relationship between the factors of moral distress frequency and work engagement was found, using Pearson's r correlation, (r = -0.419, $p < 0.001$). Further addressing this correlation statistic between the factors of moral distress frequency and work engagement, a confidence interval for correlation was calculated based on Fisher's transformation: 95% CI (-0.332, -0.499), confirming a negative correlation between these two factors (Pauly, Varcoe, Storch, & Newton, 2009).

Study limitations included a proportionally low response rate (22%) and a possible selection bias in the 6000/33,000 nurses who agreed to be contacted for research purposes. Despite these limitations, the authors' determined that moral distress and the ethical climate are correlated. Additionally, the authors recommend that moral distress should not be placed as an individual failing or the vulnerability of an individual nurse, and further investigation of the ways in which organizational factors may contribute to moral distress is needed (Pauly et al., 2009).

Moral Distress and Work Engagement

Lawrence (2011) explored factors that may enhance registered nurses' work engagement by using a non-experimental, descriptive, correlational, mixed method design to examine how nurses' moral distress, education level, and critical reflective practice (CRP) related to work engagement. The study used a convenience sample of intensive care unit (ICU) registered nurses (N = 28) in a 355-bed Magnet designated hospital. Five data collection instruments were used in the study: 1) Demographic Data Collection Tool (14 items); 2) Utrecht Work Engagement Scale

(UWES) (17 items); 3) Moral Distress Scale (MDS) in part (7 items); 4) Critical Reflective Practice Questionnaire (CRPQ) a tool developed by the investigator (22 items); and 5) The Reflection-Rumination Questionnaire (RRQ) in part, the *reflection* scale, (12 items). Using Pearson's *r* correlation, Lawrence (2011) found a negative direct relationship between moral distress and work engagement ($r = -.48$, $p = .05$). Further addressing this correlation statistic, a confidence interval for correlation was calculated based on Fisher's transformation: 95% CI (-0.130, -0.724) confirming a negative correlation between these two factors.

Study findings were limited by a non-randomized, small sample and the use of an unstandardized tool. The author concluded that more strategies to promote CRP and diminish moral distress are needed to promote RN work engagement. Additionally, further study on the role of education in the nurses' work engagement is recommended (Lawrence, 2011).

An Educational Intervention to Reduce Moral Distress

Two hospitals in Boston, Massachusetts established a Clinical Ethical Residency for Nurses (CERN) with the objective to increase the number of nurses who have knowledge, skills, and competencies in clinical ethics, and to use these skills to influence patient care in a positive way. The residency program goal was to motivate participants to act effectively and address emerging or potential ethical issues. The CERN curricula included an overview of foundational, conceptual ethical understanding, knowledge of professional responsibilities as outlined in the American Nurses Association Code of Ethics, and mock case situations (Robinson et al., 2014).

Nurses were mentored in leadership and were taught effective communication strategies over a ten month, 98-hour program. Quantitative data were collected over three years on three specific outcomes: moral distress, knowledge, and self-efficacy. Outcomes were evaluated through a quasi-experimental, mixed method design, which included pre and post-testing, ten

months apart. Three tools were used for measuring qualitative data: MDS-R (a validated tool), Ethics Knowledge Scale (designed by the authors), and The Self Efficacy Scale (designed by the authors). This information was collected from the participants' pre-intervention, and a second time two weeks' post-intervention. Quantitative data were analyzed using the SPSS software. A paired t-test was used to evaluate the impact the CERN on participant's scores: MDS-R from time one (1) to time two (2) (t [49] = 4.23, $p < .000$), supporting a significant decrease in nursing moral distress. Limitations of this study include a small number of participants in only two hospitals, and the use of two new instruments that were not validated (Robinson et al., 2014).

Summation of the Literature on Moral Distress

Published literature supports that moral distress is a common professional occurrence. It is a negative experience exacerbated by nurses' powerlessness to affect medical judgements, inadequate staffing situations, futility of care, and a perceived negative ethical climate. Likely consequences of moral distress include a negative impact on employee engagement, a potentially destructive nurse-patient relationship, and clinical nurses leaving the workplace. Acknowledgement of moral distress has influenced the nursing profession in a variety of ways, especially in recognizing the escalating cost of replacing oriented, seasoned, registered nurses (Whitehead et al., 2015).

Although knowledge about moral distress has increased since Jameton's (1984) seminal work, the majority of work is descriptive (Rittenmeyer & Huffman, 2010). At the time of this literature search, one high quality interventional study was found on the subject of moral distress (Robinson et al., 2014).

Published literature suggests that moral distress has a negative effect on nurse retention, and offers educational programming as a potential intervention to reduce distress. For this DNP

project an education program is proposed, for clinical nurses, to increase knowledge about moral distress and explore potential opportunities for reducing occasions of morally distressing events in the clinical practice setting.

Purpose

The objectives of this pilot project included 1) construction of an evidence based educational program on moral distress for clinical nurses; 2) evaluation of the program and revised as needed; 3) assess if nurses were able to identify moral distress; 4) assess whether nurses can identify healthier coping strategies to dealing to nursing moral distress in their work settings following the educational education; and 5) assess if nurses can proactively identify opportunities for reducing the frequency of moral distressing events in their work settings following the educational intervention. The predominant objective was to evaluate the quality and effectiveness of this educational intervention prior to providing a network wide educational program.

Methods

Educational Project Design

This project consisted of three parts (Appendix A): 1) *pre-educational program phase* that involved recruiting participants, providing informed consent, completion of the MDS-R and a pre-program moral distress knowledge test; 2) *educational program phase* with program implementation; and 3) *post-educational program phase* that involved the moral distress knowledge test, program evaluation with demographic questions and program revisions in anticipation of a department-wide venture.

Part I compromised participant acceptance of the e-mailed informed consent, the pre-survey MDS-R, and a pre-program knowledge test on nursing moral distress.

In Part II, participants attended an in-person educational program that was informed by available evidence on nursing moral distress, including the American Nurses Association position statement on moral distress (Rushton & Kurtz, 2015). Program educational content was shared using PowerPoint™ slides, taking about 45 minutes to present, with questions and commentary encouraged throughout this lecture. Following the didactic presentation, the participants were invited to further discuss moral distress for about 15 minutes, as a wrap up of the program.

Part III included a post-program evaluation survey. The participants also repeated the knowledge test to determine if program attendees increased their knowledge base relating to nursing moral distress.

Sample

Participants (N= 23) were recruited with a raffled incentive of two fifty-dollar Amazon™ gift certificates and one 100-dollar Amazon gift certificate.

Inclusion criteria included licensed registered nurses who work full or part time (greater than 24 hours) on an oncology unit, and provide direct patient care. Participants received an email invitation, and if they emailed the DNP student back with their interest, an email link was sent to that participant, which contained an electronic informed consent, a pre-program knowledge test, and the MDS-R. The program was presented on ten different dates/times during the months of October and November of 2017, with teaching sessions ranging from one to eleven participants. Exclusion criteria included nurses who do not administer direct patient care, and clinical nurses who work less than 24 hours a week.

Setting

The programs took place at the Hospital of the University of Pennsylvania, in the nursing conference rooms.

Instrument

Corley (2001) partnered with the American Association of Critical Care Nurses (AACN) to develop and validate the Moral Distress Scale (MDS) as a measure of nursing moral distress. In 2012, the MDS was shortened, updated and modified to address practice differences between clinicians (Hamric, Borchers, & Epstein, 2012). The Moral Distress Scale – Revised (MDS-R) is a twenty-one (21) item scale measuring moral distress levels in providers using six parallel versions (adult and pediatric versions for nurses, physicians, and other healthcare professionals (Hamric et al., 2012). Each item is scored using a Likert scale (0-4) in two dimensions: how often the situation arises (frequency) and how disturbing the situation (intensity). Item scores are tallied by multiplying and then adding to yield a total score from 0 to 336, with the lesser score showing less moral distress. The two additional questions are posed in the MDS-R to ascertain if the situation warranted leaving a position now or in the past will not be used in this project.

The original reliabilities in the psychometric testing of the MDS-R yielded Cronbach α reliabilities of 0.89 for nurses and 0.67 for physicians (Hamric et al., 2012). In the Whitehead et al. (2015) study, the MDS-R reliability was also supported with a Cronbach α of 0.90 for nurses and 0.88 for physicians, and 0.90 for other providers. Permission was obtained from the author to use the MDS-R.

Procedures

Prior to data collection, the DNP student obtained a letter of support from the Nursing Medical Director at HUP, IRB approval for the study from The Hospital of the University of Pennsylvania, and IRB approval from the Drexel University Office of Research.

Once approved, the DNP student sent email invitations to all eligible nurses, on six oncology units, to participate in the program. The nurses were informed about the study, including details of each study phase in the recruitment email as well as the *Consent to Participate* (Appendix B). Nurses who decided to participate signed an electronic *Consent to Participate* to signify agreement.

The MDS-R was administered, to the participants, on-line, one day to two weeks prior to the educational program. The results of the pre-program MDS-R reflected the frequency and intensity of morally distressing situations experienced by the clinical nurse participants. This information was proposed to inform the educational program, however, the overlapping of the program phases as well as the intention to keep the program uniform made this intention impossible. However, it was found that the administration of the MDS-R prior to the program importantly set the tone for the upcoming conference on a challenging subject, not ordinarily addressed in nursing in-services. The participants then proceeded to the on-line, ten question knowledge test about nursing moral distress (Appendix C). After participating in the 60-minute educational program (Appendix D), a second e-mail was sent to the participants asking to complete a program evaluation, provide demographic information (Appendix E), and re-take the moral distress knowledge test (Appendix C).

The program evaluation was in survey format with seven questions. To better understand the background of the participants, demographic information was collected (Appendix E).

Protection of Human Participants

A 'clickable' Consent to Participate consent, written in everyday language was developed in consultation with the University of Pennsylvania's Center for Human Phenomic Science (CHPS) Participant Advocate, also a member of a University of Pennsylvania Internal Review

Board (IRB) (Appendix B). Although complete anonymity is not possible, every effort was taken to protect confidentiality of the participants. Personal information of the participants is accessible only to the DNP student author and her chair. Participants' participation, demographic information, any comments or stories written or verbalized, as well as MDS-R answers, has been de-identified and this collected data has been stored on a University of Pennsylvania secured computer. When the data analysis and publication of this project is realized, all depersonalized and any identifying information of the participants will be destroyed.

If, during the educational program lecture or ensuing discussion, a participant became emotionally charged or distraught, and discussion with the participant could lend no resolution, that nurse would have been referred to the Emergency Assistance Program (EAP) which is offered to all employees at HUP. Also supporting the nursing staff was the HUP Pastoral Care department, where an on-call chaplain could be summoned immediately for anonymous counseling of distressing events.

Data Management

Collected quantitative data include the pretest and posttest knowledge scores and MDS-R scores. The knowledge test (Appendix C) and the MDS-R were provided to the participant in REDCap electronic format with a hard-stop function to avoid lost data points in the questionnaire administration. REDCap software is an Electronic Data Capture (EDC) browser based system, specifically designed for the biomedical research community. The assistance of a biostatistician was utilized for the REDCap software configuration.

Data Analysis

Qualitative data include participant comments during the educational program. Data were collected by the DNP student during the educational in-service; participant responses were stored for later review.

Quantitative data were analyzed with the help of a biostatistician. Demographic data was compiled using descriptive statistics. Addressing the probable serious violation of the normality assumption, quantitative data for detecting differences in the participant's pre-program knowledge test about moral distress with the same knowledge test administered after the moral distress program, was analyzed using a Wilcoxon signed-rank test for paired data on the pre and post summarized scores for each participant. (Appendix F)

Findings

Participants were primarily female, with diverse educational and clinical backgrounds. The majority had no formal ethics background and only two had attended an ethics conference. Mean years in the profession was 16.69 years with a standard deviation of 9.72 (N=13). The participant's mean years in their current position was 12.53 with a standard deviation of 8.60 (N=13). Concerning questions 1) years in the profession; and 2) years in current position; participants who entered values of less than 40 years were included in the statistics. Ten extreme outliers were omitted. On inspection of each participant's answers, it was found that a configuration error in the survey software for these two questions may have contributed to this loss.

Table 1

Participant Demographics

Participant	*N*	%
Clinical Nurse Level I	4	17.30
Clinical Nurse Level II	14	60.87
Clinical Nurse Level III	4	17.30
Clinical Nurse Level IV	1	4.35
Diploma	1	4.35
Associates Degree	1	.35
BSN	15	65.22
MSN	4	17.39
No Formal Ethics Education	17	73.91
Undergrad Ethics	10	43.47
Post Grad Ethics	4	17.39
Ethics Conference	2	8.70

Spontaneous responses of the participants during the delivery of the program were positive, heartfelt, and often intimate. One nurse was enthusiastic about the content of the program, in that it included strategies ‘helping new-to-practice and intermediate clinical nurses maintain resilience under great and inevitable pressures’. This clinical nurse leader felt that the

smaller or one-on-one meetings afforded the essential intimacy needed to address the difficult subject of moral distress, and in her opinion, was preferable over a larger group setting. Supporting this opinion is the observation that nearly every clinical nurse that participated in a one-on-one or a smaller (less than three participants) had a story to tell. In contrast, the larger group of participants was a very quiet program, and the robust dialog about the subject of moral distress simply did not happen as anticipated. One nurse in a one-on-one program recounted how she had 'taken a stand' in that she had called an ethics consult, only to be chastised for doing so in her nurse manager's office the next morning. She felt there was a trust factor that needed to be established when speaking about the subject of moral distress, and perhaps that is what was missing from the larger, less intimate group presentation.

The ten question pre-post program knowledge test (Appendix D) provided quantitative data determining learning differences post-program. Although there is a modest increase in participant knowledge, reflected by negative z scores in questions three through ten, the overall scores for this pre-post knowledge test revealed no statistically significant moral distress knowledge acquisition. However, analyzing each individual question reveals statistically significant positive changes (p=0.0457) in question eight: Name three individual capacities that are healthier ways to dealing with moral distress, and question nine (p=0.0145) Identify institutional capacities that promote healthy coping of moral distress. These two findings are meaningful for those participants that will inevitably encounter moral distress (Eizenburg et al., 2009) and now have personal as well as institutional resources to deal with this phenomenon.

A seven question post-program evaluation was administered to the participants in REDCap software. (Appendix F) In response to the question of clarity of the definition of moral distress, sixteen participants (69.57%) evaluated the program as 'very clear'. When asked if the speaker

clearly identified common symptoms of moral distress, all of the participants (100%) evaluated the program as 'well identified' or 'very well identified'. When asked if the participants could identify healthier coping strategies to manage moral distress all of the participants (100%) answered they could name some or several coping mechanisms for nursing moral distress. In response to the question of identifying ways to proactively reduce moral distress sixteen (69.57%) of the participants can name several coping mechanisms to reduce moral distress in the workplace. Importantly, all of the participants (100%) scored the program meaningful or very meaningful to them, as well as the program content was found appealing or very appealing to twenty-two (95.66%) of the participants.

Pilot Project Outcomes

This pilot program was intended to inform the feasibility of a larger departmental endeavor. Outcomes of this pilot project are derived from the evaluation of the educational program; specifically nurse responses.

Sensitive to the needs of the oncology nurses and their busy units, this pilot project was delivered to a larger group of nurses (N=13) as well as to smaller (N= 1, 2, or 3) groups. Although all respondents found the program meaningful and appealing, smaller groups engaged in enthusiastic discussion with nurse participants offering observations, personal experiences, and sharp insight into this difficult topic. In contrast, an overall lack of commentary was noted for the larger group. These participants listened respectfully to the program, yet presented almost no interaction with the DNP student or their peers. Although only one large group was observed, perhaps the observation of the nurse participant mentioned prior in this summery was correct; a feeling of trust is essential to honest interaction, and is not easily established in a large group.

There is abundant evidence that moral distress is a serious issue for nurses; however, the educational pilot had aimed for anticipated discourse of support and sharing within a large group. This was not observed, and although there was meaningful discussion of the participants in smaller groups, the feasibility of this learning approach as a departmental roll-out strategy is not endorsed. Further, there was just a modest increase in participant overall knowledge on moral distress, as reflected in the pretest-posttest.

With this information, recommendations for future education on the topic of nursing moral distress include 1) incorporating this pilot into an elective, evidence based, Knowledge-Link (on-line learning) program offered at HUP, on hand for the seasoned or new-to-practice nurse who wants to become more familiar with the topic. Additionally, this moral distress Knowledge Link program could be part of the orientation resource packet for a new employee; and 2) addressing the significant knowledge gap reflected by the post-program knowledge test of better identifying institutional capacities that promote healthy coping of nursing moral distress. This goal may be achieved by involving Unit Council leadership. Inviting speakers from the Pastoral Care Department and Ethics Committee to Unit Council meetings could proactively foster personal relationships and build trust in the anticipation of a nurse needing emotional support or emotional debriefing. Nursing leadership can further strengthen important liaisons by promoting consistent visibility of these supportive agencies.

The nurse managers and medical clinical director of oncology will receive a bound, soft copy of an executive summary outlining the findings and conclusions of the total project, after the conclusion and defense of the DNP project. Correspondingly, the DNP student plans for submission of a publishable manuscript to an appropriate nursing journal.

Strengths and Limitations

A strength of this design was the appeal to a broad group, who only needed to commit to a one-time personal obligation and two on-line surveys. A second advantage of this design was the local venue, allowing for timely data collection and analysis. One limitation is the bias of a self-selected convenience sample; these nurses may have had experience with moral distress and the data may not be reflective of the entire clinical nurse population.

Clinical Implications

Nursing moral distress is a physically and emotionally uncomfortable (Rittenmeyer & Huffman, 2009), and likely an inevitable (Eizenburg et al., 2009) nursing phenomenon, and can only be expected to increase in the complex health care environment (Ulrich, 2010). Talking about moral distress may help clinical nurses process ethical difficulties and foster clear, patient centered, communication of ethical problems to the health care team. Further, education may provide opportunities for nurses to identify and engage in personal strategies to offset moral distress as well as identify institutional supports, thereby proactively reducing the intensity and frequency of morally distressing events.

References

Corley, M. C., Elswick, R. K., Gorman, M., & Clor, T. (2001). Development and evaluation of a moral distress scale. *Journal of Advanced Nursing*, *33,* 250-256.

Eizenburg, M. M., Desivilya, H. S., & Hirschfeld, M. J., (2009). Moral distress questionnaire for clinical nurses: Instrument development. *Journal of Advanced Nursing, 65*, 85-92.

Forbes.com (2012) http://www.forbes.com/sites/kevinkruse/2012/06/22/employee-engagement-what-and-why/#252205b24629 Accessed from the internet Nov. 22, 2016.

Fry, S. T., Harvey, R. M., Hurley, A. C., & Foley, B. J. (2002). Development of a model of moral distress in military nursing. *Nursing Ethics, 9*(4), 373-387.

Hamric, A. B., Borchers, C. T., & Epstein, E. G. (2012). Development and testing of an instrument to measure moral distress in healthcare professionals. *American Journal of Bioethics Primary Research, 3*, 1-9.

Jameton, A. (1984). Nursing Practice: The Ethical Issues. *Prentice Hall, Edgewood Cliffs, NJ*.

Lawrence, L. A. (2011). Work engagement, moral distress, education level, and critical reflective practice in intensive care nurses. *Nursing Forum, 46*, 256-268.

Nathaniel, A. (2006). Moral reckoning in nursing. *Western Journal of Nursing Research, 28,* 419-438.

Olson, L. (1998). Hospital nurses' perceptions of the ethical climate of their work setting.

Image: Journal Of Nursing Scholarship, 30(4), 345-349.

Pauly, B., Varcoe, C., Storch, J., & Newton, L. (2009). Registered nurses' perceptions of moral distress and ethical climate. *Nursing Ethics,16*(5), 561-573.

Rittenmeyer, L. & Huffman, D. (2010). How professional nurses working in hospital

environments experience moral distress: A systematic review. *Journal of Advanced Medicine, 66*, 1233-1290.

Robinson, E. M., Lee, S. M., Zollfrank, A., Jurchak, M., Frost, D., Grace, P. (2014). Enhancing moral agency; Clinical ethics residency for nurses. *Hastings Center Report, 44,* 12-20.

Rushton, C. H., Kurtz, M. J. (2015). *Moral distress and YOU*. Washington, DC: American Nurses Association.

Smith, L. R. (2013). All aboard! Helping new grads navigate nursing. *Nursing Management, 44*, 8-9.

Ulrich, C. M., Hamric, A. B., & Grady, C. (2010). Moral distress: A growing problem in health professions? *The Hastings Center Report, 40,* 20-22.

Varcoe, C., Pauly, B., Storch, J., Newton, L., & Makaroff, K. (2012). Nurses' perceptions of and responses to morally distressing situations. Nursing Ethics, 19(4), 488-500.

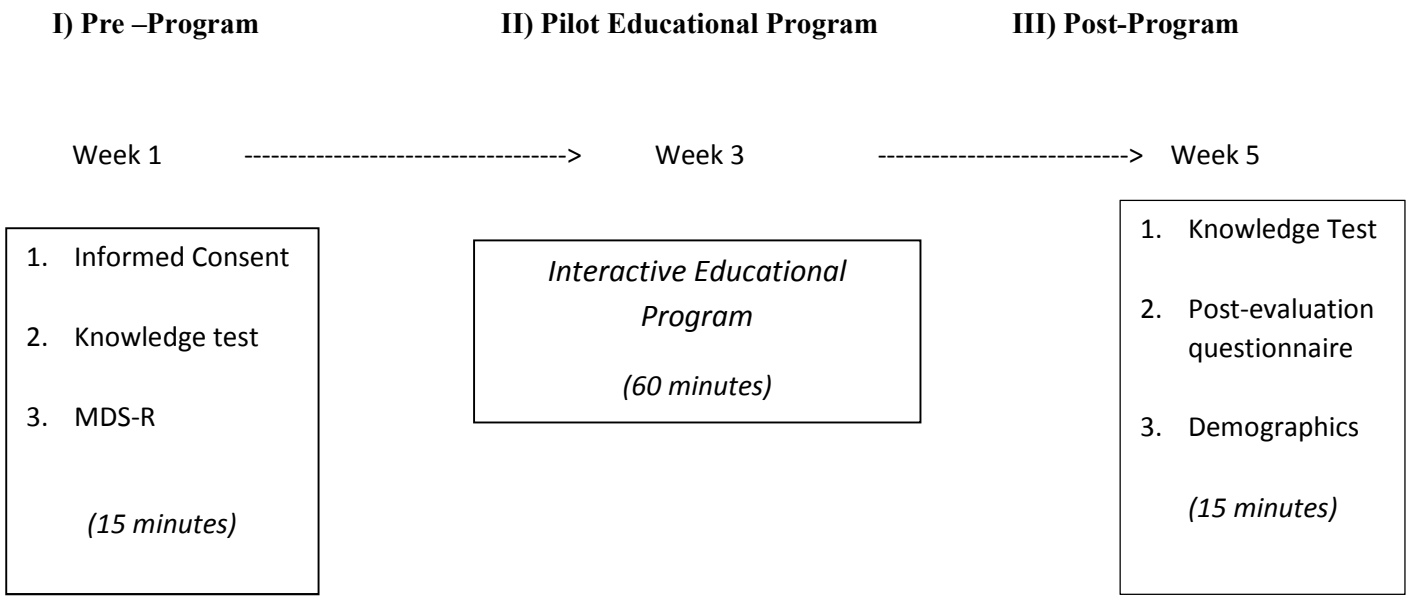
Varcoe, C., Pauly, B., Webster, G., & Storch, J. (2012). Moral distress: Tensions as springboards for action. *HEC Forum, 24,* 51-62.

Whitehead, P. B., Herbertson, R. K., Hamric, A. B., Epstein, E. G., & Fisher, J. M. (2015). Moral distress among health professionals, report of an institution-wide survey. *Journal Of Nursing Scholarship, 47,* 117-125.

Zuzelo, P. R. (2007). Exploring the moral distress of registered nurses. *Nursing Ethics, 14,* 344-359.

Appendix A

Educational Program Design



Appendix B

Study Title: Evaluating a Pilot Project on Nursing Moral Distress

My name is Elizabeth Leonard and I am a clinical nurse at the Hospital of the University of Pennsylvania (HUP), as well as a student at Drexel University. I am asking you to participate in my DNP project on nursing moral distress, examining the effect an educational program has on the moral distress of experienced clinical nurses.

Please take time to review this document thoroughly. Feel free to email me with any questions: eal75@drexel.edu or Elizabeth.Leonard@uphs.upenn.edu

What is the purpose of this project?

The purpose of this study is to evaluate the quality of this educational program, specifically, the appeal and meaningfulness of the program content, and if the participants (you) learn about moral distress, its common signs and symptoms, how patient care can be affected, and explore methods to reduce moral distress both personally, as well as ways to reduce events of moral distress in your work environment.

What happens if I say yes, I want to be in the project?

If you say yes, I will:

- Ask about your moral distress level through a validated tool, the Moral Distress Scale-Revised, online.
- Give you an online, ten (10) question pre and post-program knowledge test on nursing moral distress.
- Expect your attendance at an educational program about nursing moral distress, onsite at HUP.
- Ask for an evaluation of the program, and collect de-identified, demographic information about you, online.

How long will the study take?

It will take about one and one half hours (1.5) of your time, over five (5) weeks.

What am I being asked to do?

If you say yes, I will ask you to complete the Moral Distress Survey - Revised (MDS-R) which is a 21-point questionnaire and will take about 10 minutes to complete and a pre-program, ten (10) item knowledge test about moral distress.

You will then be invited to participate to attend an educational program, at HUP, which will take about one hour.

After you complete the in-person, educational program, I will be emailing you with a link to a follow-up program evaluation, which will take you about five (10) minutes to complete. There are seven questions in this follow-up survey that will be about improving the content of the educational program, including one open-ended question about future programs and improvements. The same knowledge test that you completed before the program will also be re-administered.

Also included in the program follow-up email are six questions to help me better understand the background of the nurses who are participating. These questions are: 1) your clinical nurse level; 2) number of years in your position; 3) number of years in nursing; 4) your educational level; 5) did your nursing education include coursework in ethics or bioethics; and 6) have you taken an ethics course or attended an ethics conference since your nursing graduation? Briefly describe (text box)

What happens if I say no, I do not want to be in the project?

No one will treat you differently. You will not be penalized. While you will not get the benefit of learning about moral distress from this program, you will not lose any benefits.

What happens if I say yes, but change my mind later?

If you say yes, you can quit at any time. Nothing bad will happen if you change your mind and wish to stop your participation, and no one will treat you any differently. If you choose to withdraw, any and all information that you have volunteered will be destroyed at the time of notification. If you wish to withdraw and have your study information destroyed, email me at eal75@drexel.edu.

Who will see my answers or my personal information?

The only people who will be allowed to your answers are myself, and my DNP project chair. I will NOT be collecting information on you, your stories, or any details about you personally. I will remove any information (your email address) that could identify you. Until your information is de-identified, data will be collected and stored on a University of Pennsylvania firewalled, encrypted, secure computer. De-identified information will be transferred and stored on a University of Pennsylvania approved encrypted portable drive. Only de-identified information will be stored on my firewalled and password-protected personal computer.

Will it cost me anything to be in the project?

Your only cost is your personal time, about one and one half an hour (1.5hrs).

Will this project help me in any way?

You will learn about nursing moral distress, as well as evidenced-based methods to diminish moral distress. You may help nurses in the future.

Will I be paid for my time?

There is the possibility of winning an Amazon™ gift certificate. There will be two $50 and one $100 gift certificates that will be raffled off to three of those nurses that complete the study.

Is there any way this project could be bad for me?

Although I will do my best to protect your privacy, risks include the unlikely but accidental breech of your personal information. Another risk is you find the content of the educational program and discussion upsetting, and you may feel you need counseling. The Pastoral Care department at HUP has round-the-clock on-call and can be summoned for immediate, confidential counseling. For those wishing to be counseled on an expedient and/or ongoing basis the Employee Assistance Program (EAP) offers emergent counseling for all HUP employees in personal crisis. If you feel the study has hurt you, you can call the IRB at The University of Pennsylvania at: **215-573-2540** or, the IRB at Drexel University: **215.255.7857**

Do I have to sign this document?

No. You only sign this document if you want to be in the project, and you sign and email me back this consent form.

What should I do if I want to be in the project?

You sign and keep a copy of this consent.
By signing the consent, you are saying:

- You agree to be in the project.
- You have reviewed this document and have contacted me with any questions.

You know that:

- You can skip demographic questions you don't want to answer.
- You can stop answering questions at any time and nothing will happen to you.
- You can call the office in charge of research at Drexel University 215-255-7857, and at The University of Pennsylvania 215-573-2540.
-

If you have any questions or concerns of any kind, please feel free to email me,

Elizabeth A. Leonard, RN, MSN, MBE

DNP student at Drexel University.

eal75@drexel.edu

Appendix C

Knowledge Test on Moral Distress

1. Can you define nursing moral distress?
   a) The pain associated with deciding on a course of action when two or more ethical values conflict
   b) A legal term for a patient's opposing reaction to the nurses' moral attitude
   c) The painful response to a situation where the nurse's moral compass is different than the opinion of another stakeholder, when delivering care
   d) The struggle to respect the moral decision of the patient, when it is different than the nurse.

2. Can you identify common physical symptoms of moral distress?
   a) Fatigue and exhaustion
   b) Persistent change in bowel habits
   c) Acute chest pain
   d) Tremors

3. Can you identify common emotional symptoms of moral distress?
   a) Markedly and persistently unstable self-image or sense of self
   b) Self-doubt, anger, and depression
   c) Transient, stress-related paranoid ideation or severe dissociative symptoms
   d) Impulsiveness, or the tendency to act or speak based on current feelings rather than logical reasoning

4. Can you identify behavioral symptoms of moral distress?
   a) Severe and recurrent temper outbursts that are grossly out of proportion in intensity or duration to the situation
   b) The sustained use of "Always" and "Never" to describe the situation, even when it is rarely true.
   c) Abandonment or resignation from a position
   d) Preoccupation with personal agenda and/or needs, to the exclusion of others

5. Can you identify a spiritual symptom of moral distress?
   a) Lack of caring about other peoples' feelings
   b) Feeling the need to break away from those customs which seem outdated
   c) Loss of meaning in activities previously considered important
   d) Wishing to spend more time in nature

6. According Corley's published literature, it is estimated that we lose _____% of clinical nurses, due to moral distress.
   a) 7%
   b) 10%
   c) 15%
   d) 26%

7. Name a way moral distress impacts the quality of patient care:
   a) Moral distress can promote more effective communication within the healthcare team, due to shared pain
   b) Moral distress can lead a clinical nurse to disengage from a patient and/or a family
   c) Moral distress undermines patient care by nurses talking about it, with each other.
   d) Moral distress is a personal issue of the nurse, and not a quality issue.

8. Name three individual capacities that are healthier ways to dealing with moral distress
   e) Work tirelessly to gain energy and momentum, solve the problem, and then take a well-deserved break.
   f) Force the issue with the other stakeholders before it gets any worse and patient care suffers
   g) Practice self-regulation, self-care, and healthy lifestyle choices
   h) Trust your instincts and shoot from the hip with moral issues. Reading the ANA's Code of Ethics is a waste of time; it changes every year anyway.

9. Identify institutional capacities that promote healthy coping of moral distress:
   a) Defensive documentation/charting education, to offset the possibility of a lawsuit.
   b) Develop a nurse-centric culture to promote professional pride and power. Nurses Rule!
   c) It is not incumbent on any institution to support healthy coping mechanisms for moral distress.
   d) Supportive leadership, policies, and organizational support services such as Pastoral Care and Employee Assistance Program (EAP).

10. What would be an activity a clinical nurse could pursue to address moral distress in an organizational capacity?
    a) This is really beyond the clinical nurses' supportive scope; nursing leadership should deal with these issues.
    b) Gather evidence and support, then force leadership to the table to deal these important issues impacting patient care.
    c) Get involved in committees, such as the Practice Council, to develop policies that support nurses' ability to preserve integrity in ethically challenging situations.
    d) Realistically, it is best to leave a difficult position and let that action send the message.

Answer Key:

1. C
2. A
3. B
4. C
5. C
6. C
7. B
8. C
9. D
10. C

Appendix D

Program Content Map

Title of the Lecture: Nursing Moral Distress

Identified Gap(s) (Why this topic is needed): Moral distress is found to be a common professional occurrence. It is facilitated by nurses feeling powerless to affect medical judgments, inadequate staffing situations, futility, and a perceived negative ethical climate. Published literature indicates moral distress has a negative effect on nurse retention and offers educational programming as a potential intervention to reduce moral distress.

OBJECTIVES	CONTENT OUTLINE	TIME FRAME	PRESENTER	TEACHING METHODS/LEARNER ENGAGEMENT STATEGIES
Define moral distress	1. "Moral distress is pain affecting the mind, the body, or relationships that results from a patient care situation in which the nurse is aware of a moral problem, acknowledges moral responsibility, and makes a moral judgment about the correct action, yet, as a result of real or perceived constraints, participates either by act or omission, in a manner he or she perceives to be morally wrong." 2. "Moral distress arises when one knows the right	5 minutes	Elizabeth Leonard, RN, MSN, MBE.	Lecture with PPt Question and answer time to clarify this definition of moral distress. Published literature: 1. Nathanial's (2006) definition, 2. Jameton's definition (1984) 3. ANA's (2015) definition

	thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (Jameton, 1984). 3. "Moral Distress is defined as the pain or anguish in response to a situation in which a nurse (1) recognizes an ethical problem, (2) realizes the professional obligation to take action to address that problem, and (3) considers the ethically correct action to take."			
Identify common symptoms of nursing moral distress	Physical • Fatigue • Exhaustion • Persistent physical symptoms • Changes in weight, eating patterns • Impaired Sleep Emotional • Frustration • Anger • Guilt • Anxiety • Depression • Burnout • Anticipatory Dread • Self-Doubt Behavioral • Withdrawal from patients	10 minutes	Elizabeth Leonard, RN, MSN, MBE.	Lecture with PPt Questions & answers Contributing stories and comments from the audience. Published literature: Rushton & Kurtz (2015)

	• Avoidance • Abandonment • Hyper-vigilance • Resignation from a position • Resignation from the profession • Cynicism • Apathy Spiritual • Spiritual Distress • Loss of meaning			
Understand the clinical significance & consequences	1. Inevitable 2. Expected to increase as health care environments become more complex 3. Responsible for a variety of human responses, including biological, emotional, and stress reactions 4. We lose up to 15% of new and intermediate nurses to moral distress. 5. The trend is increasing. 6. These typical responses negatively impact the quality of patient care, leading to increased pain, longer hospital stays, and inadequate or inappropriate care.	10 minutes	Elizabeth Leonard, RN, MSN, MBE.	Lecture from PPt Published literature: 1. Eizenburg, Desivilya, & Hirschfeld (2009). 2. Ulrich (2010). 3. Rittenmeyer & Huffman (2009) 4. Corley (2001) 5. Woods (2014) 6. Lang (2008) Question & answer Contributing stories and comments from the audience.

Learn healthier coping strategies to nursing moral distress.	Building individual Capacities: 1. Self-awareness. 2. Self-regulation 3. Learn and practice calm communication skills about emotionally charged situations. 4. Self-reflection. 5. Self-care. 6. Conscientious objection. 7. Anecdote to moral distress is moral courage. Building organizational capacities: 1. Know professional standards and guidelines. 2. Identify supportive leadership. 3. Identify organizational support services. 4. Engage in the examination and re-working of organizational policies 5. Engage in political advocacy.	10 minutes	Elizabeth Leonard, RN, MSN, MBE.	Lecture from PPt Published literature 1. Grace (2015) 2. Rushton & Kurtz (2015) Question & answer Contributing stories and comments from the audience.
Learn tools to identify and measure nursing moral distress	1. AACN's 4 A's • Ask • Affirm • Assess • Act 2. Moral Distress Thermometer. Validated Measuring Tools:	10 minutes	Elizabeth Leonard, RN, MSN, MBE.	Lecture from PPt. Questions and answers Published literature: 1. Rushton & Kurtz (2015) 3. Corley (2001) 4. Hamric et al. (2012)

	3. Corley's MDS (2001) 4. Hamric et al. MDS-R (2012)			
Wrap up discussion	1. Share summary data from the nurses' MDS-R. 2. Explore ways clinical situations could have been managed in a healthier way. 3. Questions and Answers, time permitting	15 minutes	Elizabeth Leonard, RN, MSN, MBE.	MDS-R summary data, contributed stories and comments from the audience.

Appendix E

Post Program Evaluation

1. Did the speaker make clear the definitions of moral distress, in contrast to other distressing situations?
    1) The definition is not clear at all
    2) The definition is somewhat clear
    3) The definition is clear
    4) The definition is very clear

2. Did the speaker clearly identify common symptoms of moral distress?
    1) Common symptoms of moral distress were not identified.
    2) Common symptoms of moral distress were somewhat identified.
    3) Common symptoms of moral distress were identified.
    4) Common symptoms of moral distress were well identified.

3. Can you identify healthier personal coping strategies for manage moral distress?
    1) I cannot identify a single healthy coping mechanisms for moral distress.
    2) I can name a few healthy coping mechanisms for moral distress.
    3) I can name some coping mechanisms for moral distress.
    4) I can name several coping mechanisms for moral distress.

4. Can you identify ways to proactively reduce moral distress on a professional and organizational level?
    1) I cannot identify a single way to reduce moral distress in my work place.
    2) I can name a few ways to reduce moral distress in my work place.
    3) I can name some ways to reduce moral distress in my work place.
    4) I can name several coping mechanisms to reduce moral distress in my work place.

5. Was the program on nursing moral distress meaningful to you?
    1) Not meaningful
    2) Somewhat meaningful
    3) Meaningful
    4) Very meaningful

6. Was the program content appealing?
    1) Not appealing
    2) Somewhat appealing
    3) Appealing
    4) Very appealing

7. Suggestions for improvements to this program. Please comment on programs you would like to see in the future. (text box)

To better understand the nurses who are participating, I would like to know:

1. Clinical nurse level (I, II, III, IV)
2. Number of years in your position (one to >thirty)
3. Number of years in nursing (one to >forty)
4. Your educational level (Diploma, Associate's, Bachelor's, Master's, DNP, PhD)
5. Did your academic nursing education include coursework in ethics or bioethics? (yes – no)
6. Have you taken an ethics course or attended an ethics conference since your nursing graduation? Briefly describe (text box)

Appendix F

Wilcoxon Signed-Rank Test
Pre-Post Knowledge Test

Overall:

Table 2

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	4	84.5	52.2
Negative	1	20.5	52.5
Zero	18	171	171
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -1.25
Adjustment for zeros: -527.25
Adjusted variance: 552.50

Question 1: Can you define nursing moral distress?

Table 3

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	2	44	33
Negative	1	22	33
Zero	20	210	210
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -0.50
Adjustment for zeros: -717.50

Adjusted variance: 363.00
z = 1.361
Prob > |z| = 0.1734

Question 2. Can you identify common physical symptoms of moral distress?

Table 4

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	2	38.5	70
Negative	5	101.5	70
Zero	16	136	136
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -2.63
Adjustment for zeros: -374.00

Adjusted variance: 704.38
z = 0.577
Prob > |z| = 0.5637

Question 3: Can you identify common emotional symptoms of moral distress?

Table 5

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	3	56.5	92.5
Negative	7	128.5	92.5
Zero	13	91	91
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -7.13
Adjustment for zeros: -204.75
Adjusted variance: 869.13
z = -1.187
Prob > |z| = 0.2353

Question 4: Can you identify behavioral symptoms of moral distress?

Table 6

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	3	61	70
Negative	4	79	70
Zero	16	136	136
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -2.50
Adjustment for zeros: -374.00

Adjusted variance: 704.50
z = -1.221
Prob > |z| = 0.2220

Question 5: Can you identify a spiritual symptom of moral distress?

Table 7

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	5	82.5	99
Negative	6	115.5	99
Zero	12	78	78
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -11.00
Adjustment for zeros: -162.50

Adjusted variance: 363.00
z = -0.339
Prob > |z| = 0.7345

Question 6: According Corley's published literature, it is estimated that we lose _____% of clinical nurses, due to moral distress.

Table 8

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	0	0	31.5
Negative	3	63	31.5
Zero	19	190	190
All	22	253	253

Unadjusted variance: 947.75
Adjustment for ties: -0.50
Adjustment for zeros: -617.50

Adjusted variance: 330.75
z = -0.548
Prob > |z| = 0.5839

Question 7: Name a way moral distress impacts the quality of patient care:

Table 9

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	0	0	43
Negative	4	86	43
Zero	19	190	190
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -0.25
Adjustment for zeros: -617.50

Adjusted variance: 463.25
z = -1.732
Prob > |z| = 0.0833

Question 8: Name three individual capacities that are healthier ways to dealing with moral distress

Table 10

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	0	0	61.5
Negative	6	123	61.5
Zero	17	153	153
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -1.38
Adjustment for zeros: -446.25

Adjusted variance: 633.38
z = -1.998
Prob > |z| = 0.0457

Question 9: Identify institutional capacities that promote healthy coping of moral distress:

Table 11

Overall Results

Sign	Obs	Sum ranks	Expected
Positive	1	22	33
Negative	2	44	33
Zero	20	210	210
All	23	276	276

Unadjusted variance: 1081.00
Adjustment for ties: -0.50
Adjustment for zeros: -717.50
Adjusted variance:
z = -2.44
Prob > |z| = 0.014

Question 10: What would be an activity a clinical nurse could pursue to address moral distress in an organizational capacity?

z = -0.577
Prob > |z| = 0.5637

Appendix G
Table of Evidence for DNP project Literature Review

Article Details **#1**	**Purpose**	**Methodology**	**Findings**	**Limitations/ Conclusions**	**LOE**
Title of the Article: "Development and Evaluation of a Moral Distress Scale" **Authors:** Corley, Mary; Elswick, R. K.; Gorman, Martha; Clor, Theresa. **Source of funding: Not** mentioned **Year of publication** 2001	Development of a valid and reliable tool to measure moral distress among nurses. **Theoretical framework** Jameton's conceptualization of moral distress, House and Rizzo's role conflict theory, and Rokeach's value theory.	**Description of the study and setting:** A convenience sample of 214 nurses from several United States hospitals. 96% of the nurses were female, average age was 39, 42% BSNs, average years in nursing was 4-5 years (range was 1-39 years). Average years in nursing was 4-8 years (range was 1-21 years) **Design:** A methodological design (the author's words) was used to develop and evaluate the MDS and examine the effect of moral distress on previous decisions about resigning a nursing position. A 2 stage process was used to quantify content validity (Lynn 1986). 1) A domain identification was accomplished by reviewing research findings on the moral problems in hospital settings that can result from institutional constraints. Additional items were drawn from content analysis of interviews that the PI conducted with three staff nurses in the US hospitals; by the end of the three interviews no new items had been identified. A total of 32 items were identified for the MDSS, to reflect moral problems.	**Findings**: Mean scores on each item ranged from 3.9 to 5.5, indicating moderately high levels of moral distress. **The item with the highest mean score (M=5.47) was working where the number of staff is so low that care is inadequate.** Factor analysis yielded three factors: individual responsibility, not in the patient's best interest, and deception. No demographic or professional variables were related to moral distress. 15% of nurses had resigned a position in the past because of moral distress.	**Limitations:** Size of the sample is small in comparison to the number of nurses currently employed. Further, the MDS is valid for nurses working in hospitals, but needs to be modified or other instruments are needed for nurses working in other settings. **Conclusions:** The results support the reliability and validity of the Moral Distress Scale (MDS). Given the role that moral distress may play in nurse resignations and the importance of ethical practice, reducing moral distress is an important priority.	III Seminal work to the subject of "Moral Distress"

Article Details #2	Purpose	Methodology	Findings	Limitations/ Conclusions	LOE
Title of the Article: "Work Engagement, Moral Distress, Education Level, and Critical Reflective Practice in Critical Care Nurses" **Names of the Authors**: Lisa A. Lawrence, PhD, RN **Source of funding:** not mentioned **Year of publication 2011**	**Purpose of the study** to examine how nurses' moral distress, education level, and critical reflective practice (CRP) related to their work engagement. **Hypotheses and/or research question:** What is the relationship between job-related stress, work dissatisfaction, and the current nursing crises? **Theoretical framework: (**created by the author) "Proposed Relationships Among Registered Nurse Education Level, Moral Distress, Critical Reflective practice, and Work Engagement"	**Description of the study and setting:** **Design:** A non-experimental, descriptive, correlational, mixed methods study was designed to examine how RN's educational level, moral distress, and CRP relate to their work engagement. **Sample:** Convenience sample of 198 intensive care unit RNs from a 355-bed, southwestern magnet-designated hospital. 28 participants were recruited, which was deemed acceptable as statistically significant findings resulted at this sample size level. **a) Inclusion/exclusion criteria:** a) RN status, b) greater than or equal to 50% of on-duty work times pent in the provision of direct nursing care to patients in an ICU setting; c) greater than or equal to 20hr of work time per week; d) computer literacy. The use of a Survey Monkey was used to collect data. **b) Study variables:** Independent variable were the nurses studied, and dependent variable was the data collected.	**Findings:** The majority of participants were Caucasian, females, and educated at the BSN level a) There was a positive direct relationship between CRP and work engagement *(r* = 0.56, *p* = 0.01, *r2* = 0.31) b) A negative direct relationship between moral distress and work engagement, and CRP and moral distress, together, explained 47% of the variance in work engagement. *(r* = -48, *p* = 0.05, *r2* = 0.23). Further addressing this correlation statistic, a confidence interval for correlation was calculated, based on Fisher's transformation: 95% CI (-0.130, -0.724) confirming a negative interval between these two factors.	**Limitations:** 1. The sample was non-randomized, which makes generalization more difficult, 2. the sample size was small, which increased the potential to not achieve significance, 3. The use of an unstandardized instrument (CRPQ) even though the instrument demonstrated validity in this particular study. **Conclusions –** strategies to promote CRP and moral distress are recommended, to promote RN work engagement. Additionally, further study on the role of education in the nurses' work engagement is recommended. Based upon the review of study findings, the theoretical model was revised accordingly. 1. A negative direct relationship between moral distress and work engagement 2. A positive direct relationship between CRP and work engagement 3. Moral distress and CRP together explain a significant 47% variance in work engagement. 4. A positive direct relationship between increased education level an d CRP in one unit only, the NICU	III

		c) Measures/instruments used in the study and psychometrics of measures. 5 data collection instruments were used in the study: 1. Demographic Data Collection Tool (14 items), 2. Utrecht Work Engagement Scale (UWES) (17 items), 3. 3. Moral Distress Scale (MDS) in part (7 items), 4. Critical Reflective Practice Questionnaire (CRPQ) a tool developed by the investigator (22 items), and 5. The Reflection-Rumination Questionnaire (RRQ) in part, the *reflection* scale, (12 items). One open-ended question was posed at the end of each data collection instrument. The use of questionnaires was proposed to elicit participants' perspectives, whereas one open-ended question at the end of each instrument was proposed to allow the "language and words of participants" to be included in the findings. The CRPQ (1-7 Likert) was constructed by the investigator of this study in collaboration with her Dissertation Chair, and was pilot tested in this research project. Higher scores on all study instruments reflect higher levels of work engagement, moral distress,		5. A suggested inverse relationship between education level and moral distress in one unit only, the NICU, which warrants further study. In regards to clinical practice it is suggested that practicing nurses, along with nursing and hospital leadership, promote CRP activities, e.g., promote activities which all nurses to stoke and discuss conflicts between visions of practice and practice as a lived reality, for such time may do much to promote engagement with work. The literature supports: 1. reflective discussion between nurses and clinical nurse specialists, 2. Provision of a space where RNs can meet to discuss clinical encounters, 3. group activities in trusting environments, 4. Adequate time for RNs to place clinical situations under a microscope, 5. Personal reflective diaries and regular meetings to discuss, as a group, the diary contents on a weekly or bimonthly basis, 6. Regular multidisciplinary team member meetings where all aspects of patient care are discussed, 7. Regular meetings with RNs and Leadership to discuss care provision	

		reflective disposition, and CRP. It was thought that if the CRPQ, being a new tool, the study questions could be addressed using the RRQ reflection subscale. Additionally, it was thought that the inclusion of the RRQ reflection subscale may allow for analysis of construct validity, by examining the correlations between the RRQ and the CRPQ.			

Article Details #3	Purpose	Methodology	Findings	Limitations/ Conclusions	LOE
Title of the Article: "Registered Nurses' Perceptions of Moral Distress and Ethical Climate" **Names of the Authors**: Pauly, Bernadette; Varcoe, Colleen; Storch, Janet; & Newton, Larelei **Source of funding:** not mentioned **Year of publication: 2009**	**Purpose of the study**: was to describe the level of moral distress experienced by nurses, their perceptions of the ethical climate, and the relationship between moral distress and ethical climate. **Hypotheses and/or research questions**: Using previously developed tools the research questions were: 1. What is the level of moral distress in a randomly selected sample of nurses practicing in hospitals? 2. Does moral distress vary by age, gender, years of experience, level of education, and /or	**Description of the study and setting:** **Sample: inclusion/exclusion criteria**: The study was conducted in British Columbia, CA. 6000 of the roughly 33000 British Columbian nurses consented to be contacted for research purposes on their registration forms, and met the criteria for the study by being currently employed in an acute care setting, actively participating in nursing, and being willing to complete the survey. The survey packages were prepared by the research team and then distributed by the CRNBC to a randomly generated list of 1700 RNs, with an anticipated response rate of 40%. A small gift of a teabag was included. **Design**: A quantitative cross-sectional survey was conducted. **Measures/instruments used in the study and psychometrics of measures.** The (Corley's) MDS scale, and Olson's Hospital Ethical Climate Survey (HECS) to obtain perceptions of moral distress and ethical climate among practicing nurses	**Findings:** A total of 374 nurses (22%) returned the survey. Ages ranged between 23-6 years with a mean age of 44.12 years. Employment was average of 13.2 years. (Range 1-33), and had been practicing for an average of 1.6 years (range 1-43). The nurses were similar in gender, age geographic location, and educational preparation to the Canadian and British Columbian population of RNs. a) Nurses' level of moral distress intensity was 3.88, with a range of 0 – 5.95 using a scale of 0-6. The item with the highest score was "work with levels of RN staffing that I consider unsafe" (intensity of 4.63). The second and third items of highest intensity were "required to nurse patients I am not competent to care for" and "work with RNs who are not as competent as the patient care requires." Interestingly, only 2 items on the 38 item MDS scale had frequencies lower than the midpoint and those items were the subject of end of life issues. b) Nurses' perception of ethical climate mean score was 3.48 (range 1.73 -4.96). None of the demographic factors were significantly correlated with the RNs' perceptions of the ethical climate as measured by the HECS. The HECS was negatively correlated with moral	**Limitations**: low response rate and some mismatches between survey items and the ethical concerns of some respondents. There is a possible selection bias in the 6000/33000 RNs who agree to be contacted for research purposes, and because of the low response rate the authors do not know if the sample is representative of the population. **Conclusions**: As hypothesized, the authors found the ethical climate and moral distress were significantly correlated. This may suggest that moral distress should not be framed or located as an individual concern (i.e. as a failing or vulnerability of an individual nurse). Rather, further investigation of the ways in which organizational factors contribute to moral distress is needed.	III

	employment status? 3. Do perceptions of the ethical climate vary according to age, gender, years of experience, level of education, and/or employment status? 4. Are measures of moral distress correlated with perception of the ethical climate? **a)** Theoretical framework: Jameton's definition (1984, p. 6) of moral distress, role conflict theory and value theory.		distress intensity (r = -0.0420 at $P < 0.01$). Each of the HECS factors (peers, patients, managers, hospitals, and physicians) was significantly correlated with moral distress intensity with one exception; the factor of peers was not significantly correlated with moral distress intensity. These findings suggest that a multiplicity of factors affect perceptions of the ethical climate and that there is a complex relationship between the experience of moral distress and elements of the ethical climate. This may suggest that peer support is happening.		

Article Details #1	Purpose	Methodology	Findings	Limitations/ Conclusions	LOE
Title of the Article: "How Professional Nurses Working in Hospital Environments Experience Moral Distress: A Systematic Review" **Names of the Authors:** Rittenmeyer L., & Huffman, D **Source of funding:** Joanna Briggs Institute **Year of publication: 2009**	**Hypotheses and/or research questions**: What is the best available evidence regarding professional nurses working in hospital environments and how they experience moral distress? **Type of Review**: Joanna Briggs Institute systematic qualitative review with meta-synthesis. Meta-analysis (with homogeneity) of experimental studies.	**Study Design:** This review included 39 qualitative studies, and findings were analyzed using the JBI-QARI tool. All included studies were descriptive/exploratory by nature, and the participants were nurses working in hospital environments who had experienced moral distress. Meta-synthesis was possible by categorizing the findings, and developing synthesized topics from the findings.	Four synthesis (themes) were identified related to the experience of moral distress: 1. Nurses who experience moral distress respond in a variety of ways, including different biological, psychological and stress reactions. 2. Institutional constraints and their impact on nurses' ability to advocate for patients also contributes to the experience of moral distress. 3. The inability of nurses to influence medical decisions related to patients' levels of pain and suffering also contributes to the experience of moral distress. 4. Power hierarchies that are present in many hospitals may also be a contributing factor towards moral distress for nurses when they feel that their expertise is not recognized.	**Implications for Nursing:** a) Nurses who experience moral distress are more likely to experience burnout, leave the institution, or even the profession. Some may move to a less stressful job. Institutions need to acknowledge this and provide education about the effects of moral distress on nurses and give them time to attend these sessions. b) Nurses must be given the opportunity to express their concerns about institutional constraints, and feel that they can be involved in problem-solving. Mutual respect between healthcare professionals is also important, and nurses must feel that their contribution is valued. c) Nurses must be given the opportunity to practice their profession in a way that does not violate their core values. **Implications for Research:** 1. There is a need for further high methodological quality research focusing on the effectiveness of interventions to decrease the negative effects of moral distress. 2. There is a need for further research on the impact of nurse-physician power hierarchies on patient outcomes	**V**

Article Details #5	Purpose	Methodology	Findings	Limitations/ Conclusions	LOE
Title of the Article: "Enhancing moral agency: Clinical ethics residency for nurses." **Names of the Authors:** Robinson, Lee, Zollfrank, Jurchak, Frost, and Grace **Source of Funding:** Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration under D11HP1974, Nurse Education, Practice, Quality, and Retention. **Year of Publication:** 2014	Overall goal of the Clinical Ethics Residency for Nurses (CERN) was to increase the number of nurses who have knowledge, skills, and competencies in clinical ethics to use these skills to impact patient care in a positive way. By bridging concepts of moral philosophy, professional nursing ideals, ASBH curriculum, and participants' clinical practice CERN develops clinical confidence and competence. The overarching goal is to motivate participants to act effectively to address emerging or potential ethical issues, and resolve clinical ethical problems, and prevent new ethical issues from happening	CERN offered an overview of foundational, conceptual ethical understanding, knowledge of professional responsivities as outlined in the American Nurses Association Code of Ethics, and mock case situations. The nurses were mentored in leadership as well as were taught and developed effective communication strategies. CERN involved both clinical and advanced practice nurses over a ten month, 98-hour program. **Educational evaluation:** Quantitative data was collected over three years on three specific outcomes: moral distress, knowledge, and self-efficacy. Qualitative outcomes such as moral sensitivity were also evaluated through a quasi-experimental, mixed method design, which included pre and post-testing, ten months apart. Three tools: MDS-R (validated), Ethics Knowledge Scale (designed by the authors), The Self Efficacy Scale (designed by the authors). **Procedure:** Information was contributed by the participants. Anonymous, confidential and secure. Pre classroom and two weeks post classroom day.	Findings showed a significantly lower nursing moral distress. Specifically, the impact the CERN on participant's scores: MDS-R from time 1 (M= 72.04, SD = 33.59) to time 2 (M=15.34, SD = 29.59) (t[49] = 4.23, p < .000	**Conclusions:** Program decreased nurses' moral distress. **Limitations:** small number of participants in two hospitals, the use of two new instruments which have not been validated.	III

Article Details #6	Purpose	Methodology	Findings	Limitations/ Conclusions	LOE
Title of the Article: "Exploring the moral distress of registered nurses." **Name of the Author:** Zuzelo, P. R. **Source of Funding:** Not mentioned **Year of Publication :** 2007	**Hypothesis and/or research question(s):** 1. What are the most distressing moral events encountered by RNs and how frequently are those events experienced in practice? 2. What types of formal education programs have RNs completed relating to ethical practice? 3. What resources do RNs utilize when confronted with morally distressing situations? .	**Description of the study;** Quantitative, descriptive study that used the MDS survey, with open-ended questions. All complete responses were included in the thematic analysis and tallies. Internal consistency was established (Cronbach's alpha coefficient 0.95). Study site was a 500 bed urban, not for profit, Level I trauma & Level III neonatal services. 1. Hospital RNs were recruited several ways including managers to clinical staff with a letter or electronically, meeting attendees, and requests to recipients to share the recruitment packet to other clinical staff. Study participation was voluntary and anonymous. 2. 100 RNs (36 critical care) employed in a variety of units, excluding agency, per-diem, and traveling nurses were accepted for this study. The majority (59) were BSN prepared. **3.** Instrument was the MDS with the deletion of three items. There were four (4) short answered questions.	**Moral Distress (most to least):** 1. Working with unsafe staffing levels 2. Working with physicians who were not as competent as patient care required & working with RNs & support staff who were not equal to the demands of care. 3. Following ineffectual pain medication regimens 4. Following family wishes to continue life support even when the patient's best wishes were not being served. 5. Physicians orders for unnecessary tests and treatments. 6. Treating patients as experiments. **Formal Education**: Most of the nurses surveyed (75) had never initiated an ethics committee consultation related to a patient care dilemma. Most nurses surveyed (70) had never had coursework in ethics, and most had never undergone continuing education in ethics (85). **Available Resources:**	**Limitations:** Convenience sample was used creating bias; nurses that answered the survey may be different; i.e. RNs who answered may have experienced more moral distress, be more interested in ethical issues, or have more education & ethical background. Some RNs found the MDS instructions difficult to comprehend. **Conclusions/ Implications** 1. Nurses providing direct care experience a variety of clinical events that are associated with moral distress. 2. Nurses have little or no formal ethics education 3. Nurse Managers must be adequately prepared to address nurses' concerns. specific to moral dilemmas 4. Nurses should volunteer to participate on ethics	III

			1. Most (61) respondents identified variety of supports available to nurses experiencing moral conflict; 31 identified nursing leadership, 16 identified ethics committees, 12 identified chaplains, 8 identified peer support, 5 identified risk management, and 5 identified physicians. 2. Six (6) could not identify any resources 3. Many (42) identified several barriers, including off hours (no weekend hours) thought to be available such as ethic committees (14), fear of physician anger and repercussion (9).	committees and seek education necessary for this role. 5. Educators should assess the ethical content in undergraduate and graduate nursing curricula to ensure that students are acquiring a practice specific understanding of biomedical ethics and the skills necessary for working within systems to improve ethics related outcomes. Institutions should consider implementing multidisciplinary discussions and round tables specific to ethical dilemmas, legalities and resource utilization.	